

ChemRisk

Site Inspection and Screening Risk Assessment for Dioxins/Furans

Arkwood, Inc. Site, Omaha, Arkansas

EPA ID# ARD084930148; Site ID: 0600124

December 17, 2012

Please note that my comments focus on soil contamination.

And, Jon, I had one suggestion. In one or two places, instead of saying something like “nonsensical”, I would say something like inappropriate.

General Comments

- Up to 11 ppb TEQ may be found under the 6 in soil cover, which was placed over the operating portion of the site. Is a 6 in cover now protective, based on a revised soil cleanup level?

I assume the cover was not placed over the entire site. Do we know the soil dioxin concentrations beyond the perimeter of the cover? I believe soil beyond the perimeter of the cover has vegetation, but vegetated areas may not be protective, depending on the anticipated future land use.

- The ChemRisk risk assessment on page 2 states that ...”USEPA recently requested McKesson to provide data and analysis indicating whether or not the Site was in compliance with the new risk assessment guidelines for PCDD/Fs.” Did EPA request this re-evaluation or was the re-evaluation voluntarily done by the RP?
- The ChemRisk risk assessment references the draft interim PRGs. The draft interim PRGs were based on exposure factors from the 2002 Soil Screening Guidance. I recommend referencing exposure factors from the recent Regional Screening Levels (RSLs) tables.

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- Page 3. “Over the past several years, USEPA has proposed an increased cancer potency for TCDD (e.g., from 156,000 to 1,000,000 per mg/kg-d) based on its re-evaluations of animal and epidemiological findings, and EPA plans to finalize its position in Volume 2 of “EPA’s Reanalysis of Key Issues Related to Dioxin Toxicity and Response to NAS Comments.” This change has not been formalized in the Integrated Risk Information System (IRIS) as of December 17, 2012, but the higher slope factor has been utilized in calculating preliminary remediation goals for Superfund sites (USEPA, 2009). Thus, our screening risk assessment utilizes an assumed cancer slope factor of 1,000,000 per mg/kg-d for total TEQ.” The use of 1,000,000 per mg/kg-d as a CSF is not appropriate. EPA has not finalized the Agency’s cancer reassessment and does not support the use of draft CSFs. The draft interim PRGs used a CSF of 156,000 per mg/kg-d, which is the EPA Health Assessment Document (HAD) value.

- Page 3. What is the basis for calculating an inhalation Reference Concentration (RfC), based on the oral RfD? Was this done by extrapolating from the oral RfD?
- Page 3. “Based on the observations made during ChemRisk’s Site visit and the recently collected soil PCDD/F data, standard risk assessment calculations were made to evaluate whether or not the Site may be considered to be in compliance regarding PCDD/F-related risks given USEPA’s recent changes in cancer potency and reference dose applicable to 2,3,7,8-tetrachlorodibenzo-p-dioxin (IRIS, 2012).” EPA has not made recent changes to the Agency’s CSF for TCDD.
- Table 2. The draft interim PRGs guidance did not include PRGs for the trespasser scenario, child or adult.
- Lastly, this risk assessment did not provide soil screen levels.